TO: Erika Lacro, Vice President  
University of Hawai‘i Community College System

FROM: AMT and DISL/DIMC Cross Campus Working Group

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DATE: March 12, 2021

SUBJECT: AMT and DISL/DIMC Phase II Cross Campus Discussion  
Response to UH Community College Organizational and Resource Plan #3

DESCRIPTION OF CROSS CAMPUS PROCESS

On March 5, 2021, in response to the UHCC Organizational and Resource Plan #3, Dean Nagle (UHMC), Dean Yamamoto (HawCC), Dean Umehira (LeeCC), and Dean Willets-Vaquilar (HonCC) convened and facilitated a faculty cross-campus discussion around the UHCC Automotive Technology (AMT) and Diesel Mechanics (DISL/DIMC) academic programs.

The following objectives for the meeting were identified:

1. To offer facilitation for faculty of related program areas and across campuses to review academic programs, offer potential solutions and prioritize potential solutions in response to VP Erika Lacro’s January 26, 2021 Plan #3.

2. To support development of faculty recommendations for repositioning UHCC academic programs for FY22 and beyond.
The cross campus working group convened to review data, discuss specific guiding questions outlined in the Organizational and Resource Planning framework, and recommend next steps for the following campuses and programs:

- Hawai‘i Community College Automotive Mechanics Technology
- Honolulu Community College Automotive Mechanics Technology
- Kaua‘i Community College Automotive Mechanics Technology
- Leeward Community College Automotive Mechanics Technology
- Maui College Automotive Technology
- Hawai‘i Community College Diesel Mechanics
- Honolulu Community College Diesel Mechanics

**KEY DATA INDICATORS AND SUMMARY OF FINDINGS**

The group reviewed the following data to frame the discussions.

a. VP Erika Lacro’s January 26, 2021 Plan #3 and all recommendations for academic programs, in particular AMT and DISL/DIMC listed on p.14 and 15.

b. ARPD data for each program summary analysis
   i. All AMT programs are identified as overall healthy programs
   ii. All DISL programs are identified as overall healthy programs

c. UHCC AMT and DISL/DMIC combined lecturer rough estimates per semester

<table>
<thead>
<tr>
<th></th>
<th>UHCC AMT Lecturer Estimates</th>
<th>UHCC AMT Enrollment</th>
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<tbody>
<tr>
<td>AY 18-19</td>
<td>$86241</td>
<td>1059</td>
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<tr>
<td>AY 19-20</td>
<td>$76095</td>
<td>1216</td>
</tr>
<tr>
<td>F20</td>
<td>$65949</td>
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Table of estimated UHCC AMT lecturer costs per semester

i. **Summary analysis:**
   1. DISL/DMIC have no lecturer costs.
   2. Overall UHCC AMT lecturer budgets decreased from AY 2018 to AY 2019; however, higher F20 costs reflect the consolidation of the KauCC Autobody program into the KauCC AMT program and alpha.
   3. KauCC, HawCC, HonCC and MauC have lecturers covering full-time AMT faculty who have been reassigned to Division Chair/Department chair administrative roles.
   4. HawCC and LeeCC also have lecturers teach Early College AMT courses.
d. Low enrollment data and small programs report (data from UH IRO) analysis:

i. Class size is limited by shop size so there is a pre-set capacity for many of class sections.

ii. HawCC DIMC and HonCC DISL are listed on the small programs report because they run one cohort every two years. These programs have 87.7% and 91.8% fill rates and 100% and 97.7% completion rates respectively.

iii. HawCC, KauCC, and MauC AMT programs are included in the small programs report with less than an average of 10 graduates per year 2017-2019. According to KauCC, their AAS program has smaller numbers of graduates compared to the other campuses primarily because of their math requirement which uses Math 100 rather than a math course that include applied math for the AMT field as done by the rest of the UHCC AMT programs. The majority of KauCC AMT students complete the CA and therefore, the KauCC AMT CA program is not included in the small programs report.

e. Workforce Wage Data for each program (data from UH IRO)

<table>
<thead>
<tr>
<th>CAM</th>
<th>Sect or Nu mber</th>
<th>Sector Description</th>
<th>MAJOR_DESC</th>
<th>DEGREE_LEVEL</th>
<th>STATUS</th>
<th>STUDENTS</th>
<th># OF STUDENTS WHOSE WAGE DATA ARE REPRESENTED IN REPORT</th>
<th>PCT OF STUDENTS WHOSE WAGE DATA ARE REPRESENTED ED IN REPORT</th>
<th>MEDIAN WAGE OF STUDENTS WHOSE WAGE DATA ARE REPRESENTED IN REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAW</td>
<td>7 Industrial and Engineering Techr Automotive Mechanics Tech</td>
<td>Associate</td>
<td>Graduate</td>
<td>28</td>
<td>17</td>
<td>61%</td>
<td>$28,887</td>
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<tr>
<td>KAU</td>
<td>7 Industrial and Engineering Techr Automotive Mechanics Tech</td>
<td>Associate</td>
<td>Graduate</td>
<td>14</td>
<td>9</td>
<td>64%</td>
<td>$34,833</td>
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</tr>
<tr>
<td>LEE</td>
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<td>Graduate</td>
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<td>60</td>
<td>65%</td>
<td>$31,723</td>
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<tr>
<td>MAU</td>
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<tr>
<td>HON</td>
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<td>50</td>
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<tr>
<td>HAW</td>
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<td>71%</td>
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<tr>
<td>HON</td>
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<td>Graduate</td>
<td>23</td>
<td>17</td>
<td>74%</td>
<td>$49,399</td>
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</table>

Snapshot of Wage Data from UH IRO

i. UH IRO-prepared workforce data indicates that DISL/DIMC associate programs listed produce graduates for whom the median wage exceeds living wage standards for each county per the ALICE threshold. The HawCC DIMC AAS graduate median wage is $44,141 and the HonCC DISL AAS graduate median wage is $49,299. In addition, it was noted that a Journeyworker Heavy Equipment Mechanic could earn around $70,000.

ii. UH IRO-prepared workforce data indicates that all but one (HawCC) of the AMT associate programs produce graduates for whom the median wage meet the living wage standards for each county per the ALICE threshold. However, DOE employment data from November 2019 showed HonCC AMT AAS graduates in the first year earn a median wage of $44,400, exceeding the ALICE threshold for the county.
iii. It was noted that in both industries, pay can depend on island, type of shop versus dealership, certification, and type of job.

iv. Both industries have been pandemic-resistant, are considered essential, and are expected to grow in workforce opportunities.

PROGRAM NEXT STEPS AND RECOMMENDATIONS IN RESPONSE TO MEMO

1) Maintain separate AMT and DISL/DIMC programs at HawCC and HonCC.

AMT and DISL/DIMC are separate trades that require different equipment, curriculum, skills, and certifications specific for each program. There is no need to attempt to consolidate the programs.

2) Working group to collaborate on required math course for AMT and DISL/DIMC to include applied math that is relevant and rigorous for industry standards. This group will explore hybrid delivery that could be shared among campuses if there is low enrollment. This group will also work with system to clarify minimum qualifications required to teach QM.

3) Recognize AMT curriculum across three campuses (LeeCC, MauC and KauC) are aligned and the differences among the others are required to meet unique industry needs for each island community. These differences are often driven by respective program advisory committees and local employers. Some of the unique aspects of each program are listed below:

- HonCC AMT has a 5 semester program that focuses heavily on engine performance and requires a co-op component.
- HawCC: The AMT program here at HawCC is based on 12 credit blocks and is focused more on private industry, with no dealership focus. Target employment is independent and entrepreneurial. Has a strong early college dual credit program at Kealakehe High School.
- LeeCC has a 4 semester program that aims to get students in the industry sooner. LeeCC’s program focuses on partnerships with local dealerships and manufacturers to offer dealership level educational resources for students. These partners include Audi, Fiat-Chrysler Automobiles, Ford, General Motors, and Servco Pacific (Toyota, Lexus, Subaru). The Ford ASSET program has a co-op component. During non-instructional times, the stated partnerships allow for dealer technician update training to occur at LeeCC.
- KauCC is the only campus with a green technology certificate and unique courses focused on EV’s.
- MauC has a 4 semester program that needs to train for private industry as well as dealerships and entry level as well as advanced level technicians. The program is finalizing a 2+2 articulation with four Maui County high schools and working on including EV/hybrid and enhancing advanced engine performance curriculum.
4) State-wide collaboration and partnership with DOE and UHCCs in the Automotive pathways:

- Change the image of the Automotive program within the high schools to communicate the highly technical skills needed to meet industry changes and not just as a default program for “hands-on” learners. Emphasize the importance of math, physics, and electrical coursework.
- Support automotive career exploration prior to college so students understand the field before selecting it as a major.