

CARPENTRY



ANNUAL

REPORT OF PROGRAM DATA

2021

July 1, 2020 through June 30, 2021



UNIVERSITY of HAWAII®
HAWAII
COMMUNITY COLLEGE

1. Program or Unit Description

The carpentry program allows students to participate in the “foundation-to-finish” experiences necessary to build a basic residential house while completing the required carpentry coursework. Students will graduate from the Carpentry program with the knowledge and experience necessary to begin employment at the entry level in the construction industry, or enter a four-year apprenticeship program. Credit may be given in the apprenticeship program for work completed at Hawai‘i Community College.

What is the target student or service population?

The intention of the program is to disseminate relevant information to prospective students in the intermediate to high school levels that would give them an awareness of the opportunities that are available for them in attending the program. Emphasis will also be given to nontraditional students contemplating at learning a trade. Without discrimination, the carpentry program targets any student interested in seeking the knowledge and skills needed to be employable in the construction industry.

2. Analysis of the Program/Unit

[UHCC Annual Report of Program Data \(VARPD\)](#)

Discuss the program’s or unit’s strengths and areas to improve in terms of Demand, Efficiency, and Effectiveness based on an analysis of the program’s ARPD Quantitative Indicators or comparable unit-developed measures or program-developed metrics. Include a discussion of relevant historical-trend data on key measures (i.e., last three years). Provide an explanation of any significant changes to the program’s Quantitative Indicators or unit’s key performance measures in the year of this Review.

#	Demand Indicators	2018 - 19	2019 - 20	2020 - 21	Demand Health
1.	New & Replacement Positions (State)	1390	1044	1011	Healthy
2.*	New & Replacement Positions (County Prorated)	151	117	104	
3.	Number of Majors	28	20	21	
3a.	Number of Majors Native Hawaiian	13	9	9	
3b.	Fall Full-Time	96%	90%	82%	
3c.	Fall Part-Time	4%	10%	18%	
3d.	Fall Part-Time who are Full-Time in System	0%	0%	0%	
3e.	Spring Full-Time	89%	80%	75%	

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3f.	Spring Part-Time	11%	20%	25%
3g.	Spring Part-Time who are Full-Time in System	0%	0%	0%
4.	SSH Program Majors in Program Classes	666	414	443
5.	SSH Non-Majors in Program Classes	0	0	0
6.	SSH in All Program Classes	666	414	443
7.	FTE Enrollment in Program Classes	22	14	15
8.	Total Number of Classes Taught	7	7	8

Demand indicators are “healthy” based on the availability of job positions in the construction industry.

- Demand indicators are “healthy” based on the availability of job positions in the construction industry. The Demand indicators are healthy due to the New & Replacement Positions in the Construction Industry per # of majors in the program.
- Within the construction industry, whether Carpenters Union or private contractors, there is high demand for skilled workers from the program.
- Persistence from Fall to Spring shows a decline due to students accepting employment with contractors. There is a high level of job opportunities across Hawai‘i Island.
- Number of Native Hawaiian CARP majors has been consistent over the past two academic years.
- Annually, the program conducts a survey of graduated students to follow up on their employment status. In tracking our previous graduates from Spring 2021, we found that seven are currently employed in the construction industry. One female student sought further education by enrolling in the HawCC Auto Mechanics program.

#	Efficiency Indicators	2018 - 19	2019 - 20	2020 - 21	Efficiency Health
9.	Average Class Size	13	7	8	
10.*	Fill Rate	74.2%	43.3%	48.5%	
11.	FTE BOR Appointed Faculty	2	2	2	
12.*	Majors to FTE BOR Appointed Faculty	14	10	11	
13.	Majors to Analytic FTE Faculty	14	10	11	Progressing
13a.	Analytic FTE Faculty	2	2	2	
14.	Overall Program Expenditures	\$202,264	\$192,947	\$247,583	
14a.	General Funded Budget Allocation	\$174,784	\$173,640	\$247,417	
14b.	Special/Federal Budget Allocation	0	0	0	

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14c.	Tuition and Fees	\$27,480	\$19,307	\$166
15.	Cost per SSH	\$304	\$466	\$559
16.	Number of Low-Enrolled (<10) Classes	0	6	6

- Efficiency indicators are progressing. Although the average class size has increased since 2019, the fill rate metric of 48.5% is a focal point for improvement.
- Fill rate declined in previous years due to an insufficient number of students registering for the program. The CARP program will continue to recruit prospective students from Construction Academy Program high schools as well as other local high schools.
- In an effort to increase enrollment and promote the carpentry program, we will increase our effort to collaborate with the Construction Academy in various Hawai'i Island high schools. CARP faculty have been diligently working toward creating increased options for high school students to receive dual credit that applies toward the Carpentry CA and AAS degree.
- The carpentry program will collaborate with the intermediate and high school counselors and vigorously promote the importance of learning the basic skills, i.e., reading, writing and math, in order to obtain the skills of the trade.
- The carpentry program has a strong history of serving the Hawai'i Island community for nearly 80 years. Enrollment has traditionally been consistent, and the demand for this program in regard to industry has remained high.
- The carpentry program will work closely with our industry advisory board. According to our advisory council, the carpentry program is due for some changes in order to ensure the curriculum meets industry demands. For example, this year we have shifted to more battery-operated tools on site. Students were provided funding for the purchase of their own tools in support of this curriculum updating. In the near future when faculty staffing has stabilized, the program may, for example, implement further curriculum and equipment advances pertinent to current industry standards.

#	Effectiveness Indicators	2018 - 19	2019 - 20	2020 - 21	Effectiveness Health
17.	Successful Completion (Equivalent C or Higher)	96%	88%	92%	Progressing
18.	Withdrawals (Grade = W)	3	1	0	
19.*	Persistence Fall to Spring	86%	80%	77%	
19a.	Persistence Fall to Fall	50%	37%	50%	
20.*	Unduplicated Degrees/Certificates Awarded	12	6	5	

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20a.	Degrees Awarded	7	1	0
20b.	Certificates of Achievement Awarded	12	6	5
20c.	Advanced Professional Certificates Awarded	0	0	0
20d.	Other Certificates Awarded	0	0	0
21.	External Licensing Exams Passed ¹			
22.	Transfers to UH 4-yr	0	1	0
22a.	Transfers with credential from program	0	0	0
22b.	Transfers without credential from program	0	1	0

- Unduplicated Degrees/Certificates Awarded: The program continues to believe that this number has declined for the second year in a row due to students applying for the CA only because of the cost of tuition without considering the value of a certificate or degree as to whether they would be employable. In reality, employability should be based on the skills that the students obtain after being in the program for the full two years.
- The current program faculty and staff are making every effort to encourage students to pursue their AAS degrees, which will undoubtedly help them in the future.

#	Distance Indicators	2018 - 19	2019 - 20	2020 - 21
23.	Number of Distance Education Classes Taught	0	0	3
24.	Enrollments Distance Education Classes	0	0	23
25.	Fill Rate	0%	0%	41%
26.	Successful Completion (Equivalent C or Higher)	0%	0%	91%
27.	Withdrawals (Grade = W)	0	0	0
28.	Persistence (Fall to Spring Not Limited to Distance Education)	0%	0%	78%

#	Perkins Indicators	Goal	Actual	Met
29.	1P1 Postsecondary Placement	33	50	Met
30.	2P1 Earned Recognized Credential	33	69.23	Met
31.	3P1 Nontraditional Program Concentration	N/A	N/A	N/A
32.	Placeholder - intentionally blank	N/A	N/A	N/A
33.	Placeholder - intentionally blank	N/A	N/A	N/A
34.	Placeholder - intentionally blank	N/A	0	N/A

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#	Performance Indicators	2018 - 19	2019 - 20	2020 - 21
35.	Number of Degrees and Certificates	19	7	5
36.	Number of Degrees and Certificates Native Hawaiian	12	3	4
37.	Number of Degrees and Certificates STEM	Not STEM	Not STEM	Not STEM
38.	Number of Pell Recipients ¹	10	4	2
39.	Number of Transfers to UH 4-yr	0	1	0

Instructional programs must include a discussion of ARPD health indicators with benchmarks to provide a quick view on the overall condition of the program. CTE programs must include an analysis of Perkins Core indicators for which the program did not meet the performance level in the year of this Review.

According to the Perkins Indicators data for 1P1 and 2P1, the program has met postsecondary placement and earned recognized credentials by wide margins over the federal goal. This is evidence of the effectiveness of the hands-on learning techniques practiced in the carpentry program.

Discuss significant program or unit actions and activities over the year of this Review. Include new certificate(s), stop outs, gain/loss of position(s), organizational changes, changes in unit operations or responsibilities, etc. Include a discussion of external factors affecting the program or unit.

The Hawaii Community College carpentry program has encountered many challenges during the 2020-21 academic year. Regardless of the challenges that the world encountered due to the Covid-19 pandemic, the HawCC Carpentry program was able to construct the 54th annual model home and hand over the keys to the Department of Hawaiian Home Lands. This is a unique program which partners several programs at HawCC including Electrical Installation and Maintenance Technology, Agriculture, Diesel Mechanics, and Hawaiian Lifestyles. The project has been providing custom houses for our Hawaiian community for over five decades.

Effective June 1, 2021, the lead CARP professor retired after 30 years of teaching. Due to the UH system hiring freeze, HawCC has not been able to recruit and hire a full-time faculty instructor for CARP. A current faculty member from the Construction Academy Program was reassigned to fill the CARP instructor position at the start of the fall semester.

Our longtime finish carpentry instructor has been battling major health issues and has been out on long-term medical leave since January 2021. A HawCC Construction Academy instructor stepped in to teach as a CARP lecturer in lieu of this full-time instructor's absence. We are fortunate to have a strong Construction Academy program on Hawai'i Island. The CA instructors have been able to strengthen and assist the CARP program for many years. Faculty stepping in to lead the CARP program during unprecedented circumstances is a prime example of this important partnership.

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During June 2021, the finish carpentry shop was burglarized. Many tools and two vehicles were stolen. Fortunately, one vehicle was recovered, but it was damaged. Due to the current budget constraints, we have not replaced the stolen van or tools. This loss has added to the tremendous challenges that the carpentry program is currently facing.

The construction industry is booming, the Carpenters Union and private industry are hiring anyone available, regardless of skill level or prior experience. Many high school graduates opt to go to work right away, which affects the enrollment of potential students for the program.

Instructional programs must provide the URL for the program's ARPD data tables and attachment(s) for relevant program-developed metrics discussed in this Review; non-instructional units must provide URLs for unit-specific data and attachment(s) for relevant unit-developed metrics discussed in this Review.

[2021 CARP Annual Report of Program Data](#)

3. Program Learning Outcomes or Unit/Service Outcomes

a) List all Program Learning Outcomes (PLOs) or Unit/Service Outcomes (UOs) and their alignment to the College's Institutional Learning Outcomes (ILOs).

CARP PLO1: Understand and utilize math computations, formulas, and measurements required in the carpentry field.	ILO2: Utilize critical thinking to solve problems and make informed decisions.
CARP PLO2: Understand the properties of wood, its sustainability and how it dictates the fundamental principles and procedures involved in carpentry.	ILO2: Utilize critical thinking to solve problems and make informed decisions. ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity. ILO6: Contribute to sustainable environmental practices for personal and community well-being.
CARP PLO3: Demonstrate safe practices concerning, personal safety, hand and power tool usage, and all aspects of fabrication/construction.	ILO2: Utilize critical thinking to solve problems and make informed decisions. ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity.
CARP PLO4: Use appropriate tools, materials/fasteners and current building technology to complete projects.	ILO2: Utilize critical thinking to solve problems and make informed decisions.

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	ILO4: Utilize quality comprehensive services and resources in the on-going pursuit of educational and career excellence.
CARP PLO5: Practice good work ethics and quality workmanship with regard to industry standards.	ILO1: Communicate effectively in a variety of situations. ILO2: Utilize critical thinking to solve problems and make informed decisions. ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity.
CARP PLO6: Construct projects by interpreting drawings, applying building code requirements where applicable.	ILO1: Communicate effectively in a variety of situations. ILO2: Utilize critical thinking to solve problems and make informed decisions. ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity.
CARP PLO7: Synthesize principles, procedures and objectives using critical thinking, appropriate materials, tools/equipment and procedures to construct a residential dwelling.	ILO2: Utilize critical thinking to solve problems and make informed decisions. ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai'i island, as well as other cultures of the world. ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity. ILO6: Contribute to sustainable environmental practices for personal and community well-being
CARP PLO8: Demonstrate awareness of environmental and cultural impacts at the community and global level during planning and construction phases.	ILO1: Communicate effectively in a variety of situations. ILO2: Utilize critical thinking to solve problems and make informed decisions. ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai'i island, as well as other cultures of the world. ILO4: Utilize quality comprehensive services and resources in the on-going pursuit of educational and career excellence.

	<p>ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity.</p> <p>ILO6: Contribute to sustainable environmental practices for personal and community well-being.</p>
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b) List the PLOs or UOs that have been assessed in the year of this Review. Instructional programs must list the courses that have been assessed in the year of this Review and identify the alignment(s) of Course Learning Outcomes (CLOs) to the PLOs. If no assessment was conducted in the year of this Review, provide an explanation and schedule of upcoming planned assessments.

CARP 257 (formerly CARP 57), Framing and Exterior Finish, was assessed in Fall 2020
 CARP 155 (formerly CARP 55), Concrete Form Construction, was assessed in Spring 2021.
 All CLOs for both courses were assessed, resulting in all CARP PLOs being assessed in AY2020-21

CARP 155 (formerly CAPR 55) - CONCRETE FORM CONSTRUCTION	"CLO1: Use math to construct projects."	PLO 1
	"CLO2: Identify different building materials and fasteners."	PLOs 2, 4, 7
	"CLO3: Demonstrate general and personal safety practices when using power tools in the construction of the Model Home"	PLO 3
	"CLO4: Practice good work ethics."	PLO 5
	"CLO5: Practice quality workmanship within the industry standard guidelines."	PLOs 4, 5, 6
	"CLO6: Interpret construction plans when constructing the Model Home."	PLO 6
	"CLO7: Apply building codes when constructing the Model Home."	PLO 6

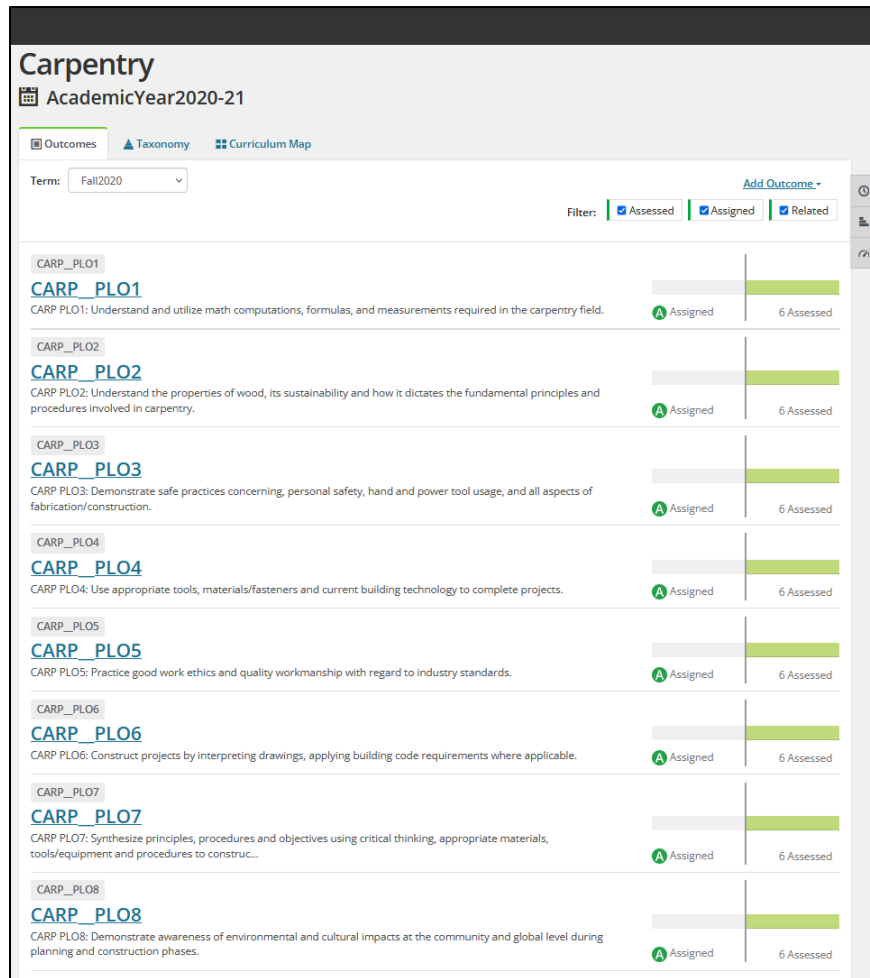
CARP 257 - FRAMING & EXTERIOR FINISH	"CLO1: Demonstrate math skills used in construction projects"	PLO 1, 6
	"CLO2: Identify different building materials and fasteners"	PLOs 2, 4, 7
	"CLO3: Use sustainable methods when possible"	PLOs 2, 8
	"CLO4: Demonstrate general and personal safety practices when using power tools in the construction of the Model Home"	PLO 3
	"CLO5: Practice good work ethics"	PLO 4
	"CLO6: Practice quality workmanship within industry standards guidelines"	PLOs 4, 5, 6
	"CLO7: Interpret construction plans when constructing the Model Home"	PLO 6
	"CLO8: Apply building codes when constructing the Model Home"	PLO 6

c) Assessment Results: provide a detailed discussion of assessment results at the program (PLO) and course (CLO), or unit (UO), levels in the year of this Review. Provide an analysis of how these results reflect the strengths and challenges of the program or unit in meetings its Outcomes.

All students in both CARP 257, Fall 2020, and CARP 155, Spring 2021, met all Course Learning Outcomes.

See the graph of CARP PLO student assessment results:

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d) *Changes that have been made as a result of the assessment results: instructional programs must provide a discussion of changes made as a result of the analysis of assessment results, e.g., to curriculum, instruction, development of student learning opportunities, faculty professional development activities, assessment strategies, etc.; non-instructional units must provide a discussion of changes made as a result of the analysis of assessment results, e.g., to services, operations, personnel training, assessment strategies, etc.*

The carpentry program is experiencing a transition period during this academic year. The assessment results for AY 2020-21 are favorable, and according to the data, no adjustments are needed. However, the current CARP faculty feel that the assessment strategies in place can be improved. We are committed to improving to get a more accurate picture of student success in regard to our carpentry program and specific course learning outcomes.

The carpentry program has been working closely with our Construction Academy high school feeder program, to streamline the opportunities for high school students to obtain CARP related credits while in high school. Due to high carpentry industry demand for unskilled workers, we feel it is imperative

to increase creative recruitment strategies to fuel enrollment into CARP, and **ALL** ATE programs at HawCC.

CARP 150 and 151 have submitted a curriculum revision in Kualii. Currently, CARP 150 is three credits, and CARP 151 is nine credits. The changes being requested would allow for each course to be six credits. These two courses make up the first semester of the two-year carpentry cohort. We feel that these changes will allow for more accurate course assessments, and a greater opportunity for high school students to earn dual credit. Ultimately, this will lead to increased student success.

4. Action Plan

Based on findings in Parts 1-3, develop an action plan for your program or unit from now until your next Review, or as appropriate, update the action plan provided in your last Comprehensive Review.

Be sure to focus on areas to improve as identified in ARPD data or unit-developed measures, the results of assessments of student learning or unit/service outcomes, and results of survey and other data used to assess your program or unit.

This action plan must include an analysis of progress in achieving previous planned improvements including the results of the prior Comprehensive Review's action plan(s). Discuss how the goals identified in that prior action plan were met and the impact on the program or unit; or, if not met, discuss why and the impact on the program or unit, and whether those goals are being carried over to the current action plan.

This action plan should include specific recommendations for improvement(s) or planned program or unit action(s) that will guide your program/unit through to the next program/unit Review cycle. The plan must include details of measurable outcomes, benchmarks and timelines.

** CTE programs must include specific action plans for any Perkins Core Indicator for which the program did not meet the performance level.*

Specify how the action plan aligns with the College's Mission and Strategic Plan. Include a discussion of how implementing this action plan will contribute to the College achieving the goals of the Strategic Plan.

<https://hawaii.hawaii.edu/sites/default/files/assets/docs/strategic-plan/HawCC-strategic-directions-2015-2021.pdf>

Be sure to list resources that will be required, if any, in section 5 below.

**The action plan may be amended based on new initiatives, updated data, or unforeseen external factors between now and the next Comprehensive Review.*

1. Collaborate with the DOE counterparts when career days or expos are conducted virtually or by Zoom to participate in providing valuable information to prospective students about how the program will take all the safety precautions based on the CDC guidelines to create a safe learning environment and still be able to have the students gain valuable life experience to prepare them for their future.

2. We will continue to create an environment conducive to learning for non-traditional students so the experience can be rewarding and enjoyable.

3. We will explore options that will aid in increased enrollment and degrees awarded. Some options are dual credit for high school students as well as embedding OSHA and other industry specific

certifications while enrolled in the CARP program. For example, the carpentry program has been actively seeking multiple options for dual credit opportunities for our Hawai'i Island high school students. With collaboration from the AEC program at HVCC we have been meeting regularly to work toward creating new student opportunities, and we will continue to do so in the coming year.

4. The carpentry program has a strong history of serving the Hawai'i Island community for nearly 80 years. Enrollment has traditionally been consistent, and the demand for this program in regard to industry has remained high. The Hawaiian Homes Model Home construction project remains as one of Hawai'i Community College's most highlighted community initiatives. This project offers students valuable on-the-job training, while providing a valuable service to the community.

Collaboration with other trade programs has been a priority for CARP. We will continue to pursue these partnerships to allow for multiple learning opportunities that benefit our Hawai'i island community. This directly aligns with the mission statement and principles put forth by Hawai'i Community College of promoting lifelong learning and emphasizing the knowledge and experience necessary for kauhale members to pursue academic achievement and workforce readiness.

5. The CARP program will seek to increase industry involvement by holding more frequent meetings with industry council members, as a group or individually. CARP program is actively seeking more members to add to our advisory council. This will assist the program faculty to gain knowledge of current industry practices, trends, standards, technology and procedures. We also see the value of making connections with the industry members that will be seeking to employ our students.

6. CARP faculty will seek professional development opportunities that are pertinent to keeping our knowledge, skills and curriculum current.

7. Seek out and embed industry relevant certifications for CARP students. OSHA 10 is an example of one certification that we plan to offer within our curriculum in the future. CARP faculty are planning to become certified OSHA instructors in the next year. We are currently looking for certifications to operate construction related machinery such as a skid steer and mini-excavator. These certifications would set our students apart from other CARP programs and industry partners. We would like to offer these certifications to community members as well, potentially via non-credit or apprenticeship partnerships.

8. We will seek increased academic support and guidance for our CARP students. CARP faculty feel this will lead to a higher rate of completed degrees. We believe the AAS should be the encouraged goal for our students and that they should have consistent access to counseling by the program and support faculty.

5. Resource Implications -

*** ONE-TIME BUDGET REQUESTS ONLY ***

Detail any ONE-TIME resource requests that are not included in your regular program or unit operating "B" budget, including reallocation of existing resources (physical, human, financial).

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*Note that CTE programs seeking future funding via UHCC System Perkins proposals must reference their ARPD Section 4. Action Plan and this ARPD Section 5. Resource Implications to be eligible for funding.

I am NOT requesting additional ONE-TIME resources for my program/unit.

I AM requesting additional ONE-TIME resource(s) for my program/unit.

Total number of items being requested: 4 (4 items max.)

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[Hawaii CC - Program & Unit Review Submission portal](https://hawaii.kualibuild.com/app/builder/#/app/60ef56c477b0f470999bb6e5/run)
<https://hawaii.kualibuild.com/app/builder/#/app/60ef56c477b0f470999bb6e5/run>

Priority Criteria (must meet at least one of the following): Priority Criteria 1, 5 and 6

1. Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.
 1. Address and/or mitigate issues of liability, including ensuring the health, safety and security of our kauhale.
 2. Expand our commitment to serving all segments of our Hawaii Island community through Pāalamanui and satellite centers
 3. Address aging infrastructure.
 4. Continue efforts to promote integrated student support in closing educational gaps.
 5. Leverage resources, investments with returns, or scaling opportunities
 6. Promote professional development.

Category-Specific Information				
Equipment	Estimated Date Needed	Quantity / Number of Units; Cost per Unit	Total Cost (with S&H, tax)	On Inventory List (Y/N); Decal #, Reason replacing
Facilities Modification	Estimated Date Needed	Total Cost	Monthly/Yearly Recurring Costs	Utilities Required
Personnel Resource	Estimated Date Needed	FTE; Position Type; Position Title	Estimated Salary	Was an Existing Position Abolished? (Y/N); Position #
Professional Development	Estimated Date Needed	Have you applied before (Y/N); was it approved?	Professional Development Type	PD Details; Impact; Total Cost
Reallocation	Estimated Date Needed	Total Cost	Monthly/Yearly Recurring Costs	Reallocation Proposal

6. Optional: Edits to Occupation List for Instructional Programs

Review the Standard Occupational Classification (SOC) codes listed for your Instructional Program and verify that the occupations listed align with the program learning outcomes. Program graduates should be prepared to enter the occupations listed upon program completion. Indicate in this section if the program is requesting removal or additions to the occupation list.

X I am NOT requesting changes to the SOC codes/occupations listed for my program.

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

[O*Net CIP-SOC Code Look-up](#)

in the **Crosswalks box, choose "Education," then enter CIP number to see related SOC codes*

List below each SOC code for which change is being requested and include details of requested code deletions and/or additions. Include justification for all requested changes.

*All requested changes to the SOC codes/occupations listed for programs must be discussed with and approved by the Department/Division Chair.