ANNUAL
REPORT OF PROGRAM DATA
2022

UNIVERSITY *of* HAWAI'I

HAWAI'I
COMMUNITY COLLEGE

July 1, 2021 through June 30, 2022

Information Technology

1. Program or Unit Description

The Information Technology program is a career-laddered, competency-based program that provides training in the use and support of business-related computer systems, data communication networks (including local area networks), and the development of business computer information systems programs using procedural, event-driven and object-oriented programming techniques. The program includes a combination of business, computer, and information technology courses. Campus-based computer and networking projects, faculty supervised laboratories, and workplace internships provide hands-on experience designed to prepare students for positions in computer support, programming, network administration, or systems development in a business information technology system. The program focuses on computers and information technology as tools to solve business problems.

The program targets undergraduates seeking individual courses, certificates, and two-year degrees.

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.

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.

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.

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.

The IT program was rated as Cautionary for 2021-2022, the same as the previous academic year. The sections not listed as Healthy were Demand and Efficiency. One category, Effectiveness, changed from Progressing to Healthy this academic year. Some competitors to the IT program are the local job market, the UH Hilo Computer Science program, and other state and mainland colleges.

The program was rated Progressing for the Demand section this academic year, while it was rated Healthy the previous two years. The number of IT jobs went down on the report, but the program has attended many meetings where the employers cannot find enough IT workers. According to [HireNet Hawaii](), some of the top job opportunities they recommend for Hawai'i County include Computer User Support Specialist, with a 15.2% job growth rate, Web Developers with a 12.5% job growth rate, and Software Developers with a 20.4% job growth rate. The IT program helps prepare students for these roles. The demand is expected to remain strong for IT jobs around the country, and students can find remote jobs anywhere in addition to in-person jobs around the state.

For Efficiency, the rating was also Progressing. The numbers were similar to the previous year, except for four fewer majors. According to the data, the program could support two analytic FTE faculty even though there is only one faculty member. The program offers most courses only once a year to avoid low-enrolled classes. The program is experimenting with co-listing both in-person and online classes to count as one class for the faculty to further avoid low-enrolled classes.

The Perkins Indicators for 1P1 Postsecondary Placement and 2P1 Earned Recognized Credential were both met, as shown below.

#	Perkins Indicators	Goal	Actual	Met
29.	1P1 Postsecondary Placement	33	94.44	Met
30.	2P1 Earned Recognized Credential	33	84.62	Met
31.	3P1 Nontraditional Program Concentration	N/A	N/A	N/A

The pandemic was still an external factor affecting the program in the 2021-2022 school year, along with the move to online Zoom instruction. In the spring semester, when restrictions were lessened, courses were offered both in-person and via Zoom to be able to reach more students. The program will need to continue to find a balance between offering online instruction to increase class sizes and offering face-to-face classes for those that prefer being in-person.

The program entered into a partnership with Western Governors University and started talks with Grand Canyon University to offer transfer articulation agreements for students, in addition to the UH Maui agreement from the previous year. These choices will help those students who want to continue their education and further their job prospects. These agreements can also be a recruiting tool for our program.

Another positive for the program this year was the winning of a cybersecurity grant from Microsoft and the American Association of Community Colleges. This grant will give the IT program additional resources for the two cybersecurity courses that were added to the AS-IT degree. The courses were previously available only as a certificate program if students wanted to come back after the degree was completed. This change will allow more students to take the classes. The grant will give funding for students to take the Security + industry certification exam after finishing these cybersecurity courses. This will make the students more marketable to employers. The grant will also include many resources from other colleges around the country and professional development opportunities for the faculty.

3. Program Student Learning Outcomes or Unit/Service Outcomes

a) *List all Program Learning Outcomes (**PLO**s) or Unit/Service Outcomes (**UO**s) and their alignment to the College's Institutional Learning Outcomes (**ILO**s).*

IT Program Learning Outcomes:
- PLO 1: Information Systems - Plan, develop, and implement the hardware, software, and procedural components of a data processing system in a business environment.
- PLO 2: Networking - Plan, develop, and implement the hardware, software, and procedural components of a data communications system in a business environment.
- PLO 3: Programming - Plan, develop, implement, and document computer programs that meet the data processing requirements of a business organization.
- PLO 4: Productivity - Work independently and cooperatively to deliver reports, programs, projects, and other deliverables that document a business organization's information technology requirements.
- PLO 5: Legal/Ethical/Professional - Base decisions and actions on the legal, ethical, and professional guidelines and practices of the information technology field.
- PLO 6: Explore - Demonstrate the ability to search, analyze, and synthesize current information and solutions in the rapidly changing information technology profession.
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Institutional Learning Outcomes	Aligned IT Program Learning Outcomes
ILO 1: Communication - Hoʻokaʻaʻike	PLO 1, 2, 3, 4, 5, 6

Communicate effectively in a variety of situations. Hoʻokaʻaʻike pono i nā manawa like ʻole.	
ILO 2: Critical Thinking - Noʻonoʻo loi Utilize critical thinking to solve problems and make informed decisions. Noʻonoʻo loi ma ka huli ʻana i ka hāʻina a hoʻoholo manaʻo me ke naʻauao.	PLO 1, 2, 3, 4, 5, 6
ILO 3: Contributions to Community and Culture - Kōkua i ke Kaiaulu a me nā Moʻomeheu Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawaiʻi island, as well as other cultures of the world. Kōkua i ke kaiaulu, me ka ʻike a me ka mākau, a me ka mahalo hoʻi i nā kānaka ʻōiwi a me nā moʻomeheu ʻōiwi o hawaiʻi nei, a me nā moʻomeheu ʻē aʻe o ka honua.	PLO 1, 2, 3, 4, 5, 6
ILO 4: Life-long Learning - Kūlia i ka nuʻu ma ka ʻImi Naʻauao Utilize quality comprehensive services and resources in the on-going pursuit of educational and career excellence. Kūlia i ka nuʻu ma ka ʻimi naʻauao a ma ka ʻoihana hoʻi ma o ka huli ʻana ma nā ʻoihana a me nā kumuwaiwai maikaʻi.	PLO 1, 2, 3, 4, 5, 6
ILO 5: Respect for Diversity - Mahalo i ke Kanaka a me ke Kaiapili Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity. Hoʻopuka a hoʻomau i kekahi kaiapuni aʻo maluhia me ona kaiapuni ʻoihana e mahalo i ke kanaka a me ke kaiapili.	PLO 1, 2, 3, 4, 5, 6
ILO 6: Environmental Sustainability - Mālama Pono i ke Kaiapuni Contribute to sustainable environmental practices for personal and community well-being. Mālama i ke kaiapuni no ke ola pono ʻana o ke kanaka a me ke kaiaulu.	PLO 1, 2, 3, 4, 5, 6

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 (**CLO**s) to the PLOs. If no assessment was conducted in the year of this Review, provide an explanation and schedule of upcoming planned assessments.*

Course	CLO	Aligned PLO
ICS 111 – Introduction to Computer Science I	CLO 1: Use an appropriate programming environment to design, code, compile, run and debug computer programs.	PLO 3,6
	CLO 2: Demonstrate basic problem-solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computing language.	PLO 1,3
	CLO 3: Illustrate basic programming concepts such as program flow and syntax of a high-level general-purpose language and basic security practices.	PLO 3,4,5
	CLO 4: Demonstrate working with primitive data types, strings, and arrays.	PLO 3
ICS 200 – Web Technology	CLO 1: Use styling and markup languages to create simple user interfaces.	PLO 1,3
	CLO 2: Use scripting to build dynamic web applications.	PLO 3
	CLO 3: Use scripting functions to optimize web applications for different devices, browser compatibility, and accessibility.	PLO 3,5

	CLO 4: Design and create a web application with client-side scripting, regular expressions, event handling, input validation, selection, repetition, and parameter passing.	PLO 1,3,6
ICS 211 – Introduction to Computer Science II	CLO 1: Use and implement abstract data types such as lists, stacks, queues, and trees.	PLO 3
	CLO 2: Select the appropriate searching or sorting algorithm based on the algorithm's behavior.	PLO 3,6
	CLO 3: Develop recursive algorithms and programs.	PLO 3
	CLO 4: Use standard libraries or packages as well as advanced object-oriented programming techniques (polymorphism, inheritance, and encapsulation).	PLO 3,4
	CLO 5: Produce robust and secure programs using exception handling and extensive program testing.	PLO 1,3,4,5
ITS 221 – Adv Comp Topic – Info Security (Note—As of Fall 2022, this will be called Introduction to Computer Security)	CLO 1: Identify and prioritize information assets.	PLO 2 (Note—As of Fall 2022, this aligns with PLO 1,2,4)
	CLO 2: Identify and prioritize threats to information assets.	PLO 2 (Note—As of Fall 2022, this aligns with PLO 1,2,4)
	CLO 3: Define an information security strategy and architecture.	PLO 2 (Note—As of Fall 2022, this aligns with PLO 1,2,4,5,6)
	CLO 4: Plan for and respond to intruders in an information system.	PLO 2 (Note—As of Fall 2022, this aligns with PLO 1,2,4,6)

	CLO 5: Describe legal and public relations implications of security and privacy issues.	(Note—As of Fall 2022, this aligns with PLO 5)
	CLO 6: Present a disaster recovery plan for recovery of information assets after an incident.	(Note—As of Fall 2022, this aligns with PLO 4,6)
ITS 124 – Introduction to Networking	CLO 1: List and describe the basic elements of computer networking.	PLO 2
	CLO 2: List and describe common network services with their associated functions and other aspects.	PLO 2,6
	CLO 3: Evaluate implementation of five common network services according to a given organizational scenario.	PLO 2,5,6
	CLO 4: Identify and describe common cable and wireless transmission media with their associated cost, ease of installation, capacity, attenuation, and immunity from interference characteristics.	PLO 2,4,5,6
	CLO 5: Evaluate implementation of common network and internetwork connectivity devices according to a given organizational scenario.	PLO 2,4,5,6
	CLO 6: Categorize numerous networking topics and methods using the OSI Reference Model as a conceptual framework.	PLO 2,4,6

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 meeting its Outcomes.*

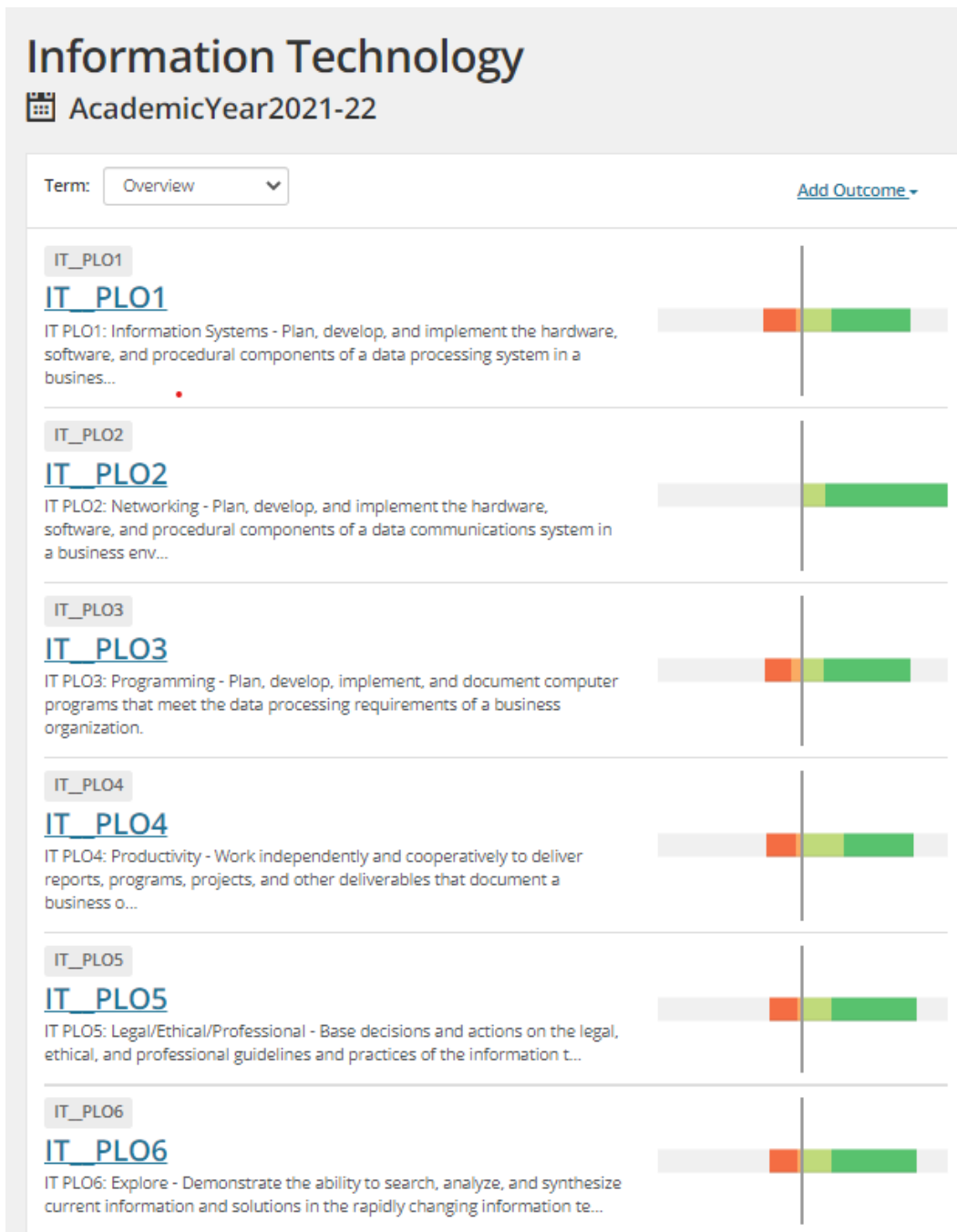| Course	Assessment Results
ICS 111 ● Spring 2022 Closing the Loop	This course was offered for the first time in Fall 2019 and was assessed (Initial) in Spring 2021. The course was developed to be consistent with the same course at other UH campuses. The class

| | uses open educational resources so that no textbook is required. The class also uses high-engagement and hands-on assignments.

This class used a final summative project to assess the course learning outcomes. The final project consists of the student creating a Python program that includes criteria such as an overall loop with a menu that gives users choices of what to do, at least two other loops somewhere in the program, at least three functions that you make, at least one array/list, at least three if statements besides the menu items, at least one file to read to/write from, exception handling in at least one place, a class, comments, and the use of PyPlot or Pandas.

In Spring 2021, 77.28% of students met or exceeded the requirements for the class. In Spring 2022, 68.42% met or exceeded the requirements for the class. Of the five students that did not meet the requirement in Spring 2022, three got a 0 because they didn't even attempt the assignment--those students stopped coming after the beginning of the semester. The other two, who were non-IT majors, scored 50% because they did not attempt all of the required items. They did both pass the class overall. In Spring 2021, the class was offered in an online synchronous environment. In Spring 2022, the class was co-listed as both in-person and online synchronous.

This project will still be used as a final project in current classes because of the success rate of the students, the relevancy of the project to future careers, and their enjoyment in completing the project. It will continue to be assessed to see if components should be changed or if individual parts of the project should change due to technology, such as the programming language used. |
|---|---|
| ICS 200
   ● Spring 2022 Closing the Loop | This course was offered for the first time in Fall 2019 and was assessed in Spring 2021. The course was developed to be consistent with the |

	same course at other UH campuses. The class uses open educational resources so that no textbook is required. The class also uses high-engagement and hands-on assignments. This class used a final summative project to assess the course learning outcomes. The final project consists of the student creating a web application published to a web server that used HTML, CSS, and Javascript. They could choose the subject material they wanted to use but needed to include at least ten individual web pages, at least one form, at least ten images, input validation, selection and repetition statements, and parameter passing in Javascript functions. The project had to work in multiple browsers and meet accessibility guidelines. In Spring 2021, 84.62% of students met or exceeded the requirements for the class. Spring 2022 was similar, with 83.33% meeting or exceeding the requirements. In Spring 2022, one of the two students that did not meet the requirements did not attempt the assignment because they stopped coming to class earlier in the semester. The other student did not attempt most of the requirements and failed the assignment, but still passed the class. The program will continue to reach out to students that stop coming to try to get them back in the class. The class was offered in an online synchronous environment in Spring 2021, and co-listed in-person and online synchronous in Spring 2022. Students seemed to enjoy the final project because of the creativity that they could use, and it was a good measure of the course learning outcomes. This project will still be used as a final project in current classes because of the success rate of the students, the relevancy of the project to future careers, and their enjoyment in completing the project. It will continue to be assessed to see if components should be changed or if individual parts of the project should change due to technology, such as the web server or use of HTML, CSS, and Javascript.

| ICS 211
    ● Fall 2021 Closing the Loop | This course was offered for the first time in Fall 2019 and was assessed initially in Fall 2020. The course was developed to be consistent with the same course at other UH campuses. The class uses open educational resources so that no textbook is required. The class also uses high-engagement and hands-on assignments.
This class used a final summative project to assess the course learning outcomes. The final project consists of the student creating a Python program that includes criteria such as including at least one class, at least one user defined function, at least one abstract data type, a searching or sorting algorithm, recursion, exception handling, Tkinter, a database, and at least one image.

In Fall 2020, students met or exceeded the course learning outcomes at a rate of 72%. In Fall 2021, 75% of students met or exceeded the requirements. One student stopped coming earlier in the semester when he moved off island. The other two students that partially met requirements still passed the course overall. The course was offered online asynchronous for both the initial and closing the loop assessment.

This project will still be used as a final project in current classes because of the success rate of the students, the relevancy of the project to future careers, and their enjoyment in completing the project. It will continue to be assessed to see if components should be changed or if individual parts of the project should change due to technology, such as the programming language used. |
| ITS 221
    ● Spring 2022 Closing the Loop | This course uses the Cisco curriculum for readings, videos, quizzes, exams, labs, and simulations. The curriculum is free to students because of instructors going through training to be Cisco certified instructors. This course is assessed with a Cisco proprietary final exam.

In Spring 2021, 90.91% of students met or exceeded the requirements. In Spring 2022, all students met or exceeded the requirements. The course was offered online synchronous in |

	Spring 2021, and co-listed as online asynchronous and in-person in Spring 2022.

This exam will still be used in future classes to assess course learning outcomes because of the success rate of the students. The course will continue to be assessed to see if technology has changed. |
| ITS 124
    ●   Spring 2022 Initial | This course uses the Cisco curriculum for readings, videos, quizzes, exams, labs, and simulations. The curriculum is free to students because of instructors going through training to be Cisco certified instructors. This course is assessed with a Cisco proprietary final exam.

In Spring 2022, all students met or exceeded the requirements of the course. The course was co-listed as online synchronous.

The final exam will continue to be used as a summative assessment for the course learning objectives. This course will be assessed again in Spring 2023. |

Information Technology

📅 AcademicYear2021-22

Term: Overview ⌄   Add Outcome ⌄

IT_PLO1

IT_PLO1
IT PLO1: Information Systems - Plan, develop, and implement the hardware, software, and procedural components of a data processing system in a busines...

IT_PLO2

IT_PLO2
IT PLO2: Networking - Plan, develop, and implement the hardware, software, and procedural components of a data communications system in a business env...

IT_PLO3

IT_PLO3
IT PLO3: Programming - Plan, develop, implement, and document computer programs that meet the data processing requirements of a business organization.

IT_PLO4

IT_PLO4
IT PLO4: Productivity - Work independently and cooperatively to deliver reports, programs, projects, and other deliverables that document a business o...

IT_PLO5

IT_PLO5
IT PLO5: Legal/Ethical/Professional - Base decisions and actions on the legal, ethical, and professional guidelines and practices of the information t...

IT_PLO6

IT_PLO6
IT PLO6: Explore - Demonstrate the ability to search, analyze, and synthesize current information and solutions in the rapidly changing information te...

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.*

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Overall, the program has been successful in helping students meet their course learning outcomes, as evidenced by the assessment results of most students meeting or exceeding the requirements. All curriculum for the program has been converted to use open educational resources and the curriculum will continually be assessed to see if changes need to be made to support students, support workforce needs, and keep up with the continual changes in technology.

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.

The program identified two action items to focus on last year during the Comprehensive Review:

Action Item 1: Marketing and Recruitment: This aligns with the Hawai'i Graduation Initiative

Strategy 1 to "Strengthen the pipeline from K-12 to the university to improve college readiness and increase college attendance."
- Attend career fairs
- Start using social media to promote program
- Interface with local schools to increase awareness of our program and to find pathways

In Spring 2022, the IT program attended the Keaʻau Career Fair to promote the program and meet with high school students. We also had a video for a virtual career fair. The program will continue to attend career fairs and other opportunities to connect with local students.

The program has been working on a website for the program to help provide information and recruit potential students. More work still needs to be done using social media. There was an article in the newspaper about the Cybersecurity program that will help recruit students.

In Summer 2022, the IT program offered their first early college course at Waiakea High School, and will continue to offer courses in the next academic year. This will help strengthen the pipeline with Waiakea High School and will help recruit students for the IT program.

The program will continue to find ways to meet this goal in the next two years.

Action Item 2: Retention: This aligns with the Hawaiʻi Graduation Initiative Strategy 2 to "Implement structural improvements that promote persistence to attain a degree and timely completion."
- Balance the need of having online classes to increase class size with the need for some students wanting in-person classes
- Flexible scheduling so that more people in different situations can still attend class
- Form better relationships between students and faculty and students with students to build community and increase retention

Our island is very spread out, and it is difficult to schedule classes for everyone to attend in-person. We want to offer online classes for people that are working, live far away from Hilo, or do not have babysitters or transportation. In addition, we want to offer in-person classes for those that need the personal interaction or need to meet requirements for in-person attendance, such as veterans and international students. We do not have enough faculty or potentially enough students to offer separate sections for each class, so we decided to offer all classes co-listed as in-person and online. While this is potentially more work for faculty, this will allow more people to be able to take our classes. In Spring 2022, we offered our classes jointly as Zoom and in-person. Starting with Fall 2022, we will try offering classes as jointly in-person and online asynchronous and assess if that meets the student needs.

To help achieve the goal of relationship building, the program will be starting a Cybersecurity club in the 2022-2023 school year. This will allow students and faculty to work together outside of class. A school club will help students feel more involved with the school and with the program. We will seek out other ways to form these relationships and to increase retention.

5. Resource Implications

* Special Resource Requests <mark>not included in operating "B" budget</mark> *

Detail any special, one-time or personnel resource requests in the categories listed in the table below that are <mark>not included in your regular program or unit operating "B" budget</mark>.

 *Note: 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.

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

☐ I AM requesting additional resource(s) for my program/unit.
Total number of items being requested: _____(4 items max.)

 *<mark>For each item requested, make sure you have gathered the following required information and all relevant documentation before you upload this Review; you will submit all information and attachments for your **Resource Request** as part of your Review document submission via the</mark>

Hawaii CC - Program & Unit Review Submission portal
https://hawaii.kualibuild.com/app/builder/#/app/60ef56c477b0f470999bb6e5/run

- ✔ **Item Description**
- ✔ **Justification**
- ✔ **Priority Criteria** (must meet at least one of the following):
  1. Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.
  2. Address and/or mitigate issues of liability, including ensuring the health, safety and security of our Kauhale.
  3. Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers
  4. Address aging infrastructure.
  5. Continue efforts to promote integrated student support in closing educational gaps.
  6. Leverage resources, investments with returns, or scaling opportunities
  7. Promote professional development.

CATEGORY	Category-Specific Information Needed			
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 of Funds	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.