2024 Annual Report of Program Data Information Technology



1. Program or Unit Mission

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 as tools to solve business problems.

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

2. Program Student Learning Outcomes or Unit/Service Outcomes

Multiple IT program classes were assessed during the 2023-2024 academic year. Overall, the program learning outcomes for the selected assignments met or exceeded the requirements in 65 percent of the students. They were not met by 29 percent of the students. Many of these students did not attempt the final project or exam, and some still passed the course without the assignment. Some of the action plans that came out of these course assessments include working with the testing center to provide better accommodations for those students taking IT certifications, modifying a final project to reduce the percent focusing on databases and increase the weight of word processing and spreadsheets, and changing a final project to be more engaging.

Information Technology Program AY2023-2024 PLO Assessment Results

Key: Red = Does not Meet // Orange = Partly Meets // Light Green = Meets // Dark Green = Exceeds

Information Technology	
AcademicYear2023-24	
Outcomes A Taxonomy Curriculum Map	
Term: Overview	Add Outcome +
IT_PL01	1
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_PL02	1
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	
	1
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	
	I
IT_PLOS	
IT PLO5	
IT PLOS: 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	
	1

3. Analysis of the Program/Unit

2024 ARPD Information Technology

The demand for new jobs stayed about the same as the previous year. 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 fill rate went up from the previous year. The IT courses for the 2023-2024 academic year were offered as both in-person and asynchronous online to reach the most students. To avoid low enrolled courses, the in-person and asynchronous sections were combined as one for the faculty. Most courses are only offered once per year to maximize the number of students per

class. There were no low enrolled courses. While there is only one full-time faculty, the data shows support for two analytic FTE faculty.

For effectiveness, successful completion dropped slightly but was still at 75 percent. The unduplicated degrees/certificates awarded were similar to previous year.

All Perkins performance indicators were met.

Some of the students worked with IT Reuse Hawai'i to refurbish e-waste laptops from Mr. K's Recycling Center and donated them to people who do not have computers at home in partnership with Hawaii First Federal Credit Union. The laptops were configured for the users and training was also given.

All students work with local businesses in an internship class to get experience and to help build connections.

In the 2023-2024 academic year, a grant allowed the program to purchase laptops for students to check out if they did not have a sufficient computer at home to meet software requirements for class. The same grant also offered CompTia certification vouchers for students to attempt IT certifications. Those that passed are able to use those credentials to help find employment.

4. Action Plan

Based on findings in Parts 1-3: How well has the program/unit met the goals from your last Comprehensive Program/Unit Review's action plan(s)? What changes are you making to your action plan(s) for the next year? Include external factors affecting the program or unit. Discuss how these recommendations for improvement or actions will guide your program or unit until the next Comprehensive Review. Specify how the action plan(s) aligns with the College's <u>Mission</u> and the <u>Ka'ao Ka'ika'i Strategic Plan</u>. Be sure to list resources that will be required, if any, in section 5 below.

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

The program identified two action items to focus on during the last 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" and Ka'ika'i Oihana to meet Hawai'i Island's workforce needs of today and tomorrow.

- 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 the 2023-2024 academic year, the IT Program attended events such as the Hilo Career Expo, Kea'au Career Fair, and the Hawai'i CC Day. These events enable us to connect with middle school students, high school students, and the community. 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, but some information was shared this way. The IT program has early college courses at Waiakea High School and Hilo High School, and will continue to offer courses in the next academic year. This will help strengthen the pipeline with Waiakea High School and Hilo High School and will continue to find ways to meet this goal. The program is still working towards applying for the National Security Agency (NSA)/Department of Homeland Security (DHS) Center of Academic Excellence Cyber Defense (CAE-CD) designation in the next academic year. This designation will help with recruitment for new students as well as provide opportunities such as additional scholarships. The grant that provided vouchers for CompTia IT certifications is another marketing and recruiting tool for new students.

Action Item 2: Retention:

This aligns with the Hawai'i Graduation Initiative Strategy 2 to "Implement structural improvements that promote persistence to attain a degree and timely completion." It also aligns with Ka'ika'i Haumāna to develop successful students for a better future and Ka'ika'i Oihana to Meet Hawai'i Island's workforce needs of today and tomorrow.

- 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 offered classes in the 2023-2024 school year as jointly in person and online asynchronous. This has seemed to work well and we will continue this in the next academic year.

To help achieve the goal of relationship building, the program participated in a Laptop Refurbishment program and a Cybersecurity club. The students repaired computers that were designated for the landfill and distributed to recipients that did not have computers at home. This allowed students and faculty to work together outside of class. A school club helps students feel more involved with the school and with the program. In the past our cybersecurity club was informal, but we have a student spearheading the push for a formal club in the next academic year. We will continue to find ways to form these relationships and to increase retention. The CAE-CD designation that the program will apply for, as mentioned in the first action plan item, will also help with retention because of the available resources that will be provided to us from the CAE program such as scholarships and curriculum development help.

Strategic Plan Alignment

- 1. Ka'ika'i Kuleana Fulfill kuleana to Native Hawaiians and Hawai'i Island.
- 2. Ka'ika'i Haumāna Develop successful students for a better future.
- 3. Ka'ika'i Oihana Meet Hawai'i Island's workforce needs of today and tomorrow.

5. Resource Implications Special Resource Requests not included in your operating "B" budget

Detail any special resource requests not funded by your regular operating budget, including reallocation of existing resources (physical, human, financial) to support action or Perkins plans. *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 resources for my program/unit.

x I AM requesting additional resource(s) for my program/unit. Total number of items being requested: 3 (4 items max.)

✓ Item Description:

- **1.** CompTia Vouchers for A+
- 2. CompTia Vouchers for Network+
- 3. CompTia Vouchers for Security+

✓ Justification:

The IT program got a Perkins grant to get vouchers for students for academic year 2024-2025. We would like to continue this for the next academic year and will apply for another grant. Offering these vouchers help to recruit new students, retain students after they get the first certification, and help make our program graduates more employable. This certification exam will be the final exam for ITS 144.

I believe that providing these vouchers and helping the students prepare for the A+ exam will benefit the student by making it easier for them to find a job, the IT program by offering recruitment and retention opportunities, and the community by providing skilled workforce. We can apply for a Perkins grant to help with these funds.

✓ Alignment to the Ka'ao Ka'ika'i Strategic Plan AY2023 - AY2029:

Each resource request must align with one or more of our Strategic Plan Core Commitments:

Kaʻikaʻi Haumāna	Develop successful students for a better future.
Ka'ika'i Oihana	Meet Hawai'i Island's workforce needs of today and tomorrow.
Ka'ika'i Noi'i	Diversify Hawai'i Island's economy through innovation and multi-sector partnerships.
Ka'ika'i Kauhale	Build and Maintain the Wellbeing of the College Kauhale.

ALLOWED CATEGORIES	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	
CompTia Vouchers for A+	November 1, 2024	25 @ \$230.00	\$5750.00	no	
CompTia Vouchers for Network+	April 1, 2026	25 @ \$178.00	\$4,450.00	no	
CompTia Vouchers for Security+	April 1, 2026	25 @ \$262.00	\$6,550.00	no	