



STATE OF HAWAII
DEPARTMENT OF EDUCATION
KA 'OIHANA HO'ONA'AUAO
P.O. BOX 2360
HONOLULU, HAWAII 96804

Date: 03/20/2025

Time: 02:00 PM

Location: 309 VIA VIDEOCONFERENCE

Committee: House Education
House Higher Education

Department: Education

Person Testifying: Keith T. Hayashi, Superintendent of Education

Resolution Title: HCR 0075 REQUESTING THE DEPARTMENT OF EDUCATION AND UNIVERSITY OF HAWAII TO ASSESS THE CRITERIA REQUIRED TO ESTABLISH AN EDUCATIONAL PIPELINE AND CURRICULUM TO ENSURE THAT STUDENTS ACQUIRE THE NECESSARY SKILLS IN ADVANCED MANUFACTURING AND CYBERSECURITY.

Department's Position:

The Hawaii State Department of Education (Department) respectfully offers comments on HCR 75, which requests the Department and University of Hawaii (UH) to assess the criteria required to establish an educational pipeline and curriculum in Advanced Manufacturing and Cybersecurity.

The Department has implemented an Advanced Manufacturing Pathway, which includes programs of study in Automation and Robotics Technology, Electro-Mechanical Technology, and Welding. These programs of study include industry standards that prepare students for a career in Advanced Manufacturing. Currently, 13 high schools across the state are offering programs of study in this pathway.

The Department has also implemented an Information Technology and Digital Transformation Pathway, which includes a program of study in Cybersecurity and industry standards that prepare students for careers in Cybersecurity. Currently, 8 high schools across the state are offering this program of study.

The Department will continue to work with UH and industry partners to promote a pipeline for students to postsecondary education and the workforce in these important fields.

Thank you for the opportunity to provide testimony on HCR 75.



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
House Committee on Education
House Committee on Higher Education
Thursday, March 20, 2025, at 2:00 p.m.

By

Debora Halbert, Vice President for Academic Strategy
University of Hawai'i System

HCR 75/HR 67 – REQUESTING THE DEPARTMENT OF EDUCATION AND UNIVERSITY OF HAWAII TO ASSESS THE CRITERIA REQUIRED TO ESTABLISH AN EDUCATIONAL PIPELINE AND CURRICULUM TO ENSURE THAT STUDENTS ACQUIRE THE NECESSARY SKILLS IN ADVANCED MANUFACTURING AND CYBERSECURITY

Chairs Woodson and Garrett, Vice Chairs La Chica and Amato, and Members of the Committees:

I am writing in support of HCR 75/HR 67, which requests the Department of Education and the University of Hawai'i to assess the criteria required to establish an educational pipeline and curriculum to ensure that students acquire the necessary skills in advanced manufacturing and cybersecurity.

As the University of Hawai'i (UH) has prioritized workforce development as a core component of its strategic plan, this resolution aligns with ongoing efforts to enhance educational pathways and better prepare students for careers in high-technology industries. The UH System has consistently worked to improve transfer pathways and articulation agreements to ensure a seamless educational experience for students transitioning from community colleges to four-year degree programs. In addition, Hawai'i P-20 Partnerships for Education facilitates pathways alignment between UH and the Department of Education (DOE). These initiatives contribute to a stronger workforce that meets the demands of Hawai'i's evolving economy.

Advanced manufacturing and cybersecurity represent critical areas of need for the state's future workforce. As industries increasingly integrate artificial intelligence, robotics, and other emerging technologies into manufacturing, it is imperative that students are equipped with relevant skills. Similarly, cybersecurity is a growing field that is vital for national security, business continuity, and personal data protection. The UH System has already made significant investments in these fields, including:

- UH West O'ahu's Bachelor of Science in Cybersecurity, with a concentration in Cyber Operations. UH West O'ahu also houses a Cybersecurity Coordination

Center that has earned designations from the National Security Agency and the Department of Homeland Security.

- UH West O‘ahu’s Bachelor of Applied Science with a concentration in Information Security and Assurance. This pathway features articulation agreements with partner programs at Honolulu Community College, Leeward Community College, and Windward Community College.
- The Honolulu Community College Cybersecurity Center, which provides resources and training in computing security and networking technology.
- Leeward Community College’s designation as a National Center of Academic Excellence in Cyber Defense, recognizing its high standards in cybersecurity education.
- Articulation agreements between Leeward Community College, UH West O‘ahu, and UH Maui College that allow students to progress from an Associate of Science in Information and Computer Science to a Bachelor of Applied Science in Information Technology and Information Security Assurance.
- The University of Hawai‘i at Mānoa’s School of Engineering, which offers degrees in multiple engineering disciplines that support advanced manufacturing and cybersecurity.
- Interdisciplinary research and coursework on material science available to students through the Hawai‘i Institute of Geophysics and Planetology (HGIP) in collaboration with the College of Engineering.
- Leeward Community College’s Associate in Science degree in the field of Integrated Industrial Technology, as well as accompanying certificate programs.

We concur with the Legislature that these are important fields for current and future job growth. Thus we support this resolution and recognize the University of Hawai‘i’s, including Hawai‘i P-20, role in fostering workforce development in advanced manufacturing and cybersecurity.

Thank you for the opportunity to provide testimony.



Hawai'i Technology Development Corporation

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JOSH GREEN M.D

GOVERNOR

SYLVIA LUKE

LT. GOVERNOR

Written Statement of
Sandi Kanemori
Interim Executive Director
Hawai'i Technology Development Corporation
before the
House Committee on Education and House Committee on Higher Education
Thursday, March 20, 2025
2:00 p.m.
Conference Room 309 & Videoconference
In consideration of
HCR75 / HR67

REQUESTING THE DEPARTMENT OF EDUCATION AND UNIVERSITY OF HAWAII TO
ASSESS THE CRITERIA REQUIRED TO ESTABLISH AN EDUCATIONAL PIPELINE
AND CURRICULUM TO ENSURE THAT STUDENTS ACQUIRE THE NECESSARY
SKILLS IN ADVANCED MANUFACTURING AND CYBERSECURITY.

Chair Woodson, Vice Chair La Chica, Chair Garrett, Vice Chair Amato, and Members of
the Committees.

The Hawai'i Technology Development Corporation (HTDC) supports HCR75 / HR67,
which will provide an educational pipeline and curriculum for critical industries in technology
and manufacturing for the State of Hawaii.

HTDC agrees that education in cybersecurity and advanced manufacturing is important to
Hawaii's sustainability future, and aligns with the Department of Business, Economic
Development, and Tourism (DBEDT) strategic plan for cradle to career pathways. HTDC has
been instrumental in fostering partnership between educators, industry leaders, and the
University of Hawaii to develop programs that inspire our next generation of technology and
manufacturing workforce.

Thank you for your consideration of supporting this bill.



**TESTIMONY IN SUPPORT OF HCR75 / HR67
REQUESTING THE DEPARTMENT OF EDUCATION AND UNIVERSITY OF HAWAII TO ASSESS THE
CRITERIA REQUIRED TO ESTABLISH AN EDUCATIONAL PIPELINE AND CURRICULUM TO ENSURE THAT
STUDENTS ACQUIRE THE NECESSARY SKILLS IN ADVANCED MANUFACTURING AND CYBERSECURITY.**

Committee on Education
Representative Justin H. Woodson, Chair
Representative Trish La Chica, Vice Chair

Committee on Higher Education
Representative Andrew Takuya Garrett, Chair
Representative Terez Amato, Vice Chair

Thursday, March 20, 2025 at 2:00 PM
Conference Room 309 & Videoconference
415 South Beretania Street

Chairs Woodson and Garrett, Vice Chairs La Chica and Amato, and Members of the Committees:

The Hawaii Military Affairs Council ("MAC") **supports** HCR75 / HR67 which requests the Department of Education and University of Hawaii to assess the criteria required to establish an educational pipeline and curriculum to ensure that students acquire the necessary skills in advanced manufacturing and cybersecurity.

The MAC was established in 1985 when the Chamber was appointed by the State to serve as the liaison to the military. The MAC advocates on behalf of Hawaii's military, and is comprised of business leaders, academic institutions, State and County officials, members of the CODEL, community leaders, labor unions and organizations and retired U.S. flag and general officers. The MAC works to support Hawaii's location as a strategic U.S. headquarters in the Indo-Asia-Pacific region which is crucial for U.S. national and homeland security.

The defense industry is a vital economic driver for Hawaii, ranking as the state's second-largest industry after tourism. The MAC advocates for the integration of innovative technologies and advancements in cybersecurity to transform the fields of advanced manufacturing and digital security. These efforts could serve as powerful catalysts to further strengthen and diversify Hawaii's economy.

Thank you for the opportunity to offer testimony in support.

HCR-75

Submitted on: 3/19/2025 1:11:56 PM

Testimony for EDN on 3/20/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Michael Olderr	Individual	Support	Written Testimony Only

Comments:

Our cyber security in this country is dangerously lacking. One bad hack to our water filtration system or power grid can destroy many lives and livelihoods. I support this resolution!