

August 10, 2020

MEMORANDUM

TO: Aloysius Helminck, Dean, College of Natural Sciences

Brennon Morioka, Dean, College of Engineering

FROM: Michael Bruno, Provost Wichael Bruno

Laura Lyons, Interim Associate Vice Chancellor for Academic Affairs

SUBJECT: Response to the Review of Computing-Related Programs at UH Manoa

Thank you for your thoughtful responses to the review of computing-related programs at UH Manoa. Both departments exhibited great flexibility and commitment to this unique program review effort, and we greatly appreciate your patience in awaiting this response.

These programs must be a priority for the university and the state. This review was intended to focus on identifying areas of synergy between the ICS and Engineering programs, as well as potential areas of development within each. We take great interest in ensuring a successful shift in focus for ICS, as identified in the program review, and supporting the growth of both programs. We are pleased that both departments have clearly taken the recommendations of the review team seriously, and that you provided strategies and plans for addressing them.

We are very impressed with the work to date of the faculty "Change Team" in ICS, who have clearly embraced the recommendations of the review team. We appreciate the thoroughness of the "Improvement Plan for Action" provided by the team, and agree with the foci on program improvement through positive changes to curriculum and evaluation, while also addressing the program climate and relationship to the community and employers. Several clear, actionable items were put forth in support of these goals, and we look forward to learning more about your successes and challenges in your future progress report. We will be especially interested to hear more about how the new capstone course and internship programs fare, as well as the certificates in Data Science and Creative Computational Media that are on the horizon, both of which are excellent examples of cross-disciplinary collaborations with Engineering, as well as other units on campus.

The review team expressed concerns over the fact that the new, growing, and well-reviewed Computer Engineering program is largely delivered by a very small number of faculty. The process of hiring new faculty presents many challenges in the best of times, and in the current environment even more so. We encourage you to continue working on increasing collaborations



with HI-DSI, to engage more ICS faculty in the program, and other units on campus, and look forward to learning more about your efforts in this area moving forward.

Recognizing the challenges to shifting the longstanding focus of the ICS department within the College of Natural Sciences, the review team provided several possible scenarios for structural changes involving both departments. All but one of their recommendations involved the creation of a new department within Engineering. Two of those recommendations suggested moving some ICS faculty while the other recommendation suggested moving all faculty. In their responses, the CNS Dean and ICS leadership expressed a preference for no structural change and counting on the engagement of key faculty to strengthen and revitalize existing programs. Engineering, on the other hand, expressed an interest in creating a new EECS department and moving the practically-oriented ICS faculty in.

As a University, we are likely to experience significant change and turbulence in the coming years as a result of the budget crisis created by the COVID-19 pandemic. At the same time, revitalized and refocused programs in these areas are a necessary component of what UH must do to help the state recover and diversify to a more sustainable and resilient economy. The need to address the issues raised in the program review is even more urgent than when the team visited

Several of the team's recommendations involve actions that would require additional funds and hires. The unfortunate reality is that we will need to be creative in achieving our goals in a severely fiscally constrained environment. We believe this will likely necessitate some structural change to provide a unit that is highly focused on meeting the needs of Hawai'i in computer science and engineering.

As such, we would like to see the two Colleges begin a dialogue around the possibility of creating a single computing department to house all of UH Mānoas computing-related programs, certificates, and initiatives. This effort should be led by the College Deans and Department Chairs, in consultation with the Office of the Vice Chancellor for Academic Affairs, and should be inclusive of impacted faculty, staff, and students. Recognizing these unprecedented times, this should be done within the context of the overall campus planning to reshape UH for fiscal year 2022 and beyond.

C: Scott Robertson, Chair, ICS
Wayne Shiroma, Chair EE
Krystyna Aune, Dean, Graduate Division
April Goodwin, Director of Program Development and Review, OVCAA
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