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May 16, 2019

To: Elaine P. Scott, Dean, School of Science, Technology, Engineering & Mathematics at University of Washington Bothell

Alucca aneud Kima Carigue, Ph. D.

From: Rebecca Aanerud, Interim Vice Provost and Dean Kima Cargill, Interim Associate Dean for Academic Affairs and Planning

RE: Review of the Division of UW Bothell Computing and Software Systems (2017-2018)

This memorandum outlines the Graduate School's final recommendations from the Division of UW Bothell Computing and Software Systems academic program review. Detailed comments on the review can be found in the documents that were part of the following formal review proceedings:

- Charge meeting between review committee and administrators (November 3rd, 2017)
- Self-Study (December 15th, 2017)
- Site visit (January 29th-30th, 2018)
- Review committee report (October 25th, 2018)
- The Division of UW Bothell Computing and Software Systems response to the report (April 23rd, 2019)
- Graduate School Council consideration of review (May 16th, 2019)

The review committee consisted of:

Michael Ernst, Professor, UW School of Computer Science and Engineering (Committee Chair) Pradyot (PK) Sen, Professor, UW Bothell School of Business

John Feo, Director, Northwest Institute for Advanced Computing, Pacific Northwest National Laboratory (PNNL)

Scott Leutenegger, Professor and Chair, Computer Science Department, University of Denver

The Division of UW Bothell Computing and Software Systems offers the following degrees: Bachelor of Arts, Bachelor of Science, Master of Science in Computer Science and Software Engineering, and Graduate Certificate in Software Design and Development.

Members of the Graduate School Council presented findings and recommendations to the full Council at its meeting on May 16th, 2019. A summary of this report, composed by Graduate School Council Members, is attached to this document.

Graduate School Council Recommendations

The Graduate School Council commends the Division of UW Bothell Computing and Software Systems on the strength of its programs, faculty, and students. After discussion, the Council recommended the following:

• Full academic program review in 10 years (2027-2028)

We concur with the Council's recommendations.

Mark Richards, Provost and Executive Vice President
Patricia Moy, Associate Vice Provost for Academic and Student Affairs, Office of the Provost
Bill Erdly, Associate Professor & Chair, Division of Computing & Software Systems
Jason Johnson, Associate Dean for Undergraduate Academic Affairs
Becky Corriell, Director, Academic Affairs & Planning, the Graduate School
Academic Unit Review Committee Members
Members of the Graduate School Council
GPSS President

Attachment

University of Washington | Graduate Council

Summary of the review of The Division of UW Bothell Computing and Software Systems

Academic Unit Name: The Division of UW Bothell Computing and Software Systems

Degrees/Certificates Included in the Review:

- Bachelor of Science in Computer Science and Software Engineering (CSSE)
- Bachelor of Arts in Applied Computing
- Bachelor of Arts in Interactive Media Design
- Bachelor of Science in Computer Engineering
- Master of Science Computer Science & Software Engineering

Certificate included in the Review: Graduate Certificate in Software Design & Development

Program Strengths:

Comments across constituents in the review including program faculty, staff, and students were generally very positive, noting specifically good mentoring and support for faculty; strong collaborative environment, with faculty enjoying being at UW Bothell; strong, dedicated junior faculty; strong service to the local community and the regions with a high economic impact on the local area. As a unit, they "focus on being a highly-inclusive organization as we respect the ideas, opinions, and concerns voiced by our community...[and] provide important access to UW-quality computer science and software engineering education....Graduates are highly successful and make important contributions to economic development and our community. [Their] campus and programs are diverse – and [their] domestic and international students benefit from our focus on teamwork, group projects, writing, and industry/research collaborations, in addition to the requisite technical competencies expected of CSSE graduates."

Challenges and Risks:

The integration with the School of STEM represents the largest challenge for CSS as indicated by interviews with faculty, staff, and unit leadership. Faculty seemed to believe that they have not been adequately consulted in the integration process. Current concerns have to do with physical separation from advisors, staffing issues (both less than adequate in number of lack of continuity among staff), lack of clarity about resource allocation, etc.

There was also an overarching concern with decreasing support for teaching but no change in the size of classes. Faculty do a lot of student mentoring, and they have a heavy teaching load. There was a strong sense that teaching loads should/could be lightened to account for the other ways that faculty have had to "make up" for dwindling resources; the committee focused more on ways to get funding back (i.e., graders, peer feedback for students) and also suggested hiring more faculty as well as more advisors and

better communication between faculty and advisers so student get consistent uniform advice (and work to create better access to advisors). There is a need to hire more faculty within CSS. CSS is currently turning students away, and there is room to further serve the Bothell and Seattle area. However, classroom and lab space is a problem

Areas of concurrence:

The committee and the unit response agree that the overall climate is positive, and they agree on the strengths presented in the report. They also agree that CSS need to secure resources for long-term funding, more specifically to initiate partnerships to integrate CSS with STEM and with the University and local companies. *The committee set out a specific set of suggestions, and the unit responded in detail to the ways in which they have already/plan to pursue most all of them.*

Graduate School Council Recommendations:

The committee made a number of recommendations, many of which center around the need for more/better/different communication. For example, they suggest that leadership better "[c]ommunicate to faculty that there is advising and IT support dedicated to CSS, but these resources are centrally administered" and "communicate to the faculty and staff the allocation of resources such as budget, staffing, and space within STEM to dispel the perception that CSS is receiving fewer resources that other STEM units"; and "communicate resource constraints to faculty and staff in CSS." Faculty "need to provide prioritized requests." Overall, there should be "[m]ore socializing and/or dedicated meetings between advisors and faculty from respective programs."

As such, the GSC recommends that the leadership and faculty focus specifically on ways in which they can enhance their communication.

The others center around structural issues: hiring an administrative assistant for the CSS chair/division; rethinking the committee structures and faculty governance; balancing administrative workload of the faculty.

As such, the GSC recommends a second focus on those specific recommendations made in the report that enhance the structure and balance of the unit and the workload of the people within it.

Overall, the committee notes that "CSS and STEM must give immediate and [more] serious attention to the integration of CSS into the school." Both the unit and the Graduate School Council agree.

Overall recommendation: Full review in 10 years, with the next review integrated into a STEM review, if appropriate.