

UNIVERSITY OF WASHINGTON

The Graduate School *G-1 Communications* Box 353770 Seattle, Washington 98195-3770

Telephone: (206)543-5900 Fax: (206)685-3234

June 13, 2011

To: Matt O'Donnell, Dean, College of Engineer

From: Gerald J. Baldasty, Vice Provost and Dean

James S. Antony, Associate Vice Provost and Associate Dean for Academ Associate Dean for Academ

Review of the Department of Computer Science & Engineering (2010-2011) RE:

This memo outlines the recommendations from the academic program review of the Department of Computer Science & Engineering (CSE). Detailed comments on the program can be found in the documents that were part of the following formal review proceedings:

- Charge meeting between review committee, department, and administrators (April 23, 2010)
- CSE self-study (November 17, 2010)
- Site visit (January 27-28, 2011)
- Review committee report (March 11, 2011)
- CSE response to the review committee report (April 15, 2011)
- Graduate School Council consideration of review (May 19, 2011)

The Graduate & Professional Student Senate (GPSS) submitted its report following the conclusion of the review. Since the GPSS report neither informed the review committee report nor allowed the department to formally respond, it will be considered a parallel document outside the context of the departmental review.

The review committee consisted of:

Daniel T. Schwartz, Professor, UW Chemical Engineering (Committee Chair)

E. Virginia Armbrust, Professor, UW Oceanography

John Guttag, Professor, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology

Eric Horvitz, Distinguished Scientist, Microsoft Research

Jeannette M. Wing, Professor, Computer Science Department, Carnegie Mellon University

A subcommittee of the Graduate School Council presented findings and recommendations to the full Council at its meeting on May 19, 2011. The Council found, in the words of the review committee, one of the very top computer science programs in the world. The department "delivers high-quality education to undergraduate and graduate students, generates excellent research, and provides important service to the university and broader community." After discussion, Council recommended continuing status for department's degree programs, with the next review to be scheduled for the 2020-2021 academic year. Specific comments and recommendations regarding the department and its degree programs include the following:

Program Strengths

- An international profile that brings prominence to the University of Washington and strengthens regional ties to industry and communities across the Pacific Northwest.
- An impressive range of degree programs at the undergraduate level, a nationally prominent doctoral program, and an evening/distance professional master's program for employed professionals. The degree offerings are linked in various ways to many other units on campus, and CSE works hard to make its programs accessible to the significant community of computer science professionals in the region.
- Top-notch, data-intensive science and engineering research that provides important interdisciplinary collaborations within the UW and throughout the region.
- Innovative programs designed to expand both faculty and student diversity.
- The program's "four-point" educational philosophy: integrating education, research, outreach, and "striving for excellence in response to high expectations".
- Recent redesign of the undergraduate curriculum to expand course diversity and program flexibility.
- Numerous awards received by faculty and students that underscore its national and international impact.

Challenges & Risks

Future challenges include the following:

- Developing strategies to sustain the department's successes in the face of two issues: (1) competition for resources, students, and faculty; and (2) exceptional demand for access to CSE courses by other UW programs.
- Crafting a plan to make the case for strategic hiring while at the same time developing a plan for sustaining its global leadership if the faculty complement remains static.
- Finding the resources to grow the number of faculty and the number of students.
- Recruitment and retention of a strong and diverse faculty in the face of competing employment opportunities outside academia as well as anticipated retirement of existing faculty.

Areas of Concurrence and/or Disagreement

- Both CSE and the review committee concurred that the department should work towards increasing the number of Ph.D. graduates per faculty member. Steps towards achieving this goal have already been undertaken by the department.
- Both the report and response concur that this is an extremely healthy program making important contributions to both the overall mission of UW and to the field as a whole.

Graduate School Council Recommendations

• The Graduate School Council recommends continuing status for the department's programs, with review in 10 years (2020-2021).

We concur with the Council's comments and recommendations.

cc: Mary E. Lidstrom, Interim Provost and Executive Vice President
Douglas J. Wadden, Executive Vice Provost for Academic Affairs and Planning
Ed Taylor, Vice Provost and Dean, Undergraduate Academic Affairs
Werner Stuetzle, Divisional Dean for Natural Sciences, College of Arts & Sciences
Henry M. Levy, Professor and Chair, Computer Science and Engineering
Members of the Computer Science & Engineering Review Committee
Members of the Graduate School Council
David Canfield-Budde, Academic Program Specialist, The Graduate School
GPSS President