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March 10, 2000

Thomas L. Daniel, Professor  
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Re: 10-Year Review of Computer Science and Engineering

Dear Tom:

The following is a summary of issues discussed at our meeting on March 8, 2000.

The specific action needed at the end of your review is a recommendation regarding the continuation of the Department of Computer Science and Engineering BS, MS and PhD degree programs. The range of possible recommendations runs from suspension of entry to continuation with a subsequent review in ten years. Shorter terms can be recommended if deemed appropriate. Perhaps more important than the specific recommendation of status and review period, your review has the potential to offer the Department and the administration an independent assessment of the health of the Department's programs and advice on how they might be improved.

The review is most likely to be successful if tasks are divided among the committee members effectively. The internal reviewers may be able to conduct some assessments and interviews prior to the day of the actual site visit. It is suggested that the external reviewers be relied upon to serve as content experts with regard to degree programs. They also are likely to be the most able to comment on developments in the field that should be addressed.

The site visit will culminate with an exit interview divided into two portions, the first with the Chair and perhaps other program representatives present, and the second without these program representatives. The College Deans and Divisional Dean will be present at both sessions, as will the Deans and Associate Deans of the Graduate School and the Office of Undergraduate Education, and the Associate Provost for Academic Planning. Please let us know what your formal recommendation regarding continuance is likely to be early in the second period of the exit interview. We hope to have your written report within 6 weeks of the site visit and to have the UW members of the committee attend a meeting of the Graduate School Council to present your findings and comment on the Department's response. Augustine McCaffery will provide you with a model report if you would like. Please call upon her for any assistance you may need in the course of this review.

The most important objective of your review is an assessment of the academic and educational quality of the Department and its programs. The important questions are: Are they doing what they should be doing? Are they doing it well? How can they do things better? How should the University aid them? Each question can be asked in each sphere of operation. The test to apply in deciding how to prioritize issues is to consider how important each is to scholarship or education. Listed below are several issues that may help you as you begin. This list is not intended to restrict your review; you should consider all issues that you deem to be sufficiently important and eliminate those of lesser importance.

### General

It is clear that this is a very strong department that contributes to the University and the State in many ways. The Department is frequently cited on campus when examples of "best practices" are given. It has an extraordinary mandate for growth arising from the demand for its own educational programs, the regional and national interest in the research it produces, and its contribution to other educational and research activities on campus. The self-study describes several of the Department's responses to this mandate.

The report of the External Advisory Committee, Appendix H to the self-study, is likely to be of use as you begin.

### Educational Programs

#### Undergraduate

In this booming field, there is unusual demand for access to the major. The problem created is not so much the Department's (although they certainly feel it) as it is the University's. The points following are raised in that context.

1. If you are able, please comment on the issue of unmet demand for access to the Computer Science and Computer Engineering BS programs in view of:
  - (a) Alternatives on the Seattle campus and the branch campuses. Note that the Department has expanded to produce 80 graduates in each of its undergraduate majors each year, contributes to alternate majors on the Seattle campus and is aiding the development of the Computing and Software Systems programs at branch campuses. The self-study lists alternative majors on the Seattle campus and describes the efforts of the Department to direct students it does not accept to these alternatives.
    - Does something need to be done (perhaps outside the Department) to better aid/advise those students who are not admitted to the majors? Note that the Department already makes a substantial effort in this regard.
    - Do the alternative (non-CSE) majors fit the need? Can they be made more attractive to those that do not gain entry to the CSE majors?
  - (b) The Department's view that it should accept into its major only those undergraduates "prepared to benefit fully from education that a top research University is able to provide," while observing that admission to the University is not similarly structured.
  - (c) Please take note of the Department's comments regarding "Workforce pressures" and "Educational efficiency" on pages 33-35 of the self-study.

## Graduate

1. A large fraction of the graduate students admitted with the expectation that they will earn the PhD exit with the MS. There are several reasons why this may occur, including the extraordinary opportunities in the field versus the demands of doctoral education and the difficulty in identifying students with the characteristics for success in the PhD program from among the applicants. Your evaluation of the situation would be very helpful.
2. Are the steps described in the self-study that have been taken to quickly identify those graduate students who will not be successful in the PhD program adequate? Relevant comments are made on page 6 of the report of the External Advisory Committee.
3. The Department has adopted guidelines regarding conflict of interest. Suggestions made by the graduate students are referred to on page 3 of the External Advisory Committee report. Do the graduate students feel that their concerns have been met by the Departmental policy? Do you feel that their interests are adequately protected? Is the exchange of information within the Department consistent with the academic mission?
4. The External Advisory Committee recommended initiation of a seminar series and other steps to address the issue of starting companies. Your thoughts on this issue would be valuable.

## Faculty and research

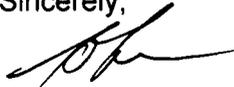
1. As you know, the strength of faculty and their research programs are the foundation for vibrant educational programs. Your evaluation of the Department's research strength its impact on programs outside the Department is important. Are the benefits of collaboration with faculty outside the department significantly realized?
2. Do you agree with the advice of the External Advisory Committee for hiring strategy (page 4 of the report)? If so, are conditions such that the Department can heed the advice? With 15 possible hires, should (is) attention being given to the development of Centers that would be competitive for large scale federal funding?
3. The self-study and strategic plan (Appendix O) comment on the need to maintain a "low-bs" environment to conserve morale and effort. In addition, page 30 of the self-study states that, "the University of Washington seems to many of us to be characterized by constant unnecessary struggle – it's just plain hard to get things done..." The comments on pages 34 and 35 regarding departmental culture may also be relevant. Your report may be a way to advance specific advice on practices that should be eliminated or instituted.

## Resources

1. University life has many positive aspects that serve to retain faculty. Do you see practical steps that can be taken, including removal of impediments, to maintain the attraction for this faculty?
2. The salary issue in this Department has been addressed within the past year by the Provost (based on the External Advisory Committee report), but a 7.5% gap with the peer average seems to remain (page 30 of the self-study). Your comments and recommendations will be useful.
3. Is there anything outside the Department that can be done to speed the filling of the many vacant slots?

- 4 Do you see practical on campus remedies to the space issue that are not being pursued? Is off-campus rental space a possibility while the building is being completed? What is the impact on recruitment and retention of faculty? On educational programs?
- 5 The Department is quite concerned about departmental and individual rewards for entrepreneurial activity (e.g., page 32 of the self-study). You may be able to recommend changes or areas in which a review of practices should be undertaken.
- 6 Do you have suggestions regarding efficiencies that might be gained in the way the department conducts administrative business?

Sincerely,



John T. Slattery, Associate Dean  
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